



The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
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September 9, 1997

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CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : American National Power -
Blackstone Energy Project
PROJECT LOCATION : Blackstone
EOEA NUMBER : 11208
PROJECT PROPONENT : American National Power, Inc.
DATE NOTICED IN MONITOR : July 9, 1997

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c.30, ss.61-62H) and Sections 11.04 and 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project requires the preparation of an Environmental Impact Report (EIR).

Project Description

As presented in the Environmental Notification Form (ENF), the project consists of the construction of a 580 megawatt (MW) natural gas-fired combined cycle power plant on 147 acres of land located immediately south of the Mendon town line between Elm Street and Bellingham Road in Blackstone. Access to the site will be from the existing Kimball Sand and Gravel Company access drive off Elm Street. The total area to be developed is approximately 21 acres; except for the gas and electric interconnect easements, the remaining acreage (a good portion of which are wetlands contiguous to the Mill River which empties into Harris Pond, a backup drinking water supply for the City of Woonsocket, Rhode Island) will be conveyed to the Town of Blackstone. The project is located in the Blackstone River drainage basin.

The plant will be fueled primarily by natural gas, supplied through a Tennessee Natural Gas Pipeline Company high pressure pipeline located approximately 4,000 feet to the northeast. A second gas pipeline interconnect to an Algonquin Gas Pipeline is under consideration as well. Regardless of which pipeline(s) are tapped, and regardless of which party will ultimately be responsible for obtaining permits for the new pipeline(s), the environmental impacts associated with the construction of the pipelines should be addressed in the EIR for this project. A New England Power 345 kV transmission line located northwest of the project site will be utilized to connect the power plant to the regional power grid. Any upgrades and associated environmental impacts should be addressed in the EIR. Although the quantity has not yet been determined, there will be a need for storage of low sulfur (0.05%) distillate oil on site in the event of a disruption of gas service; similar projects have needed approximately one million gallons. It is expected that the Department of Environmental Protection (DEP) Air Quality Permit will stipulate that the oil may not be used for more than 30 days (720 hours) per year. The facility will be designed to meet Lowest Achievable Emission Rate (LAER) and Best Available Control Technology (BACT) standards, including use of Selective Catalytic Reduction (SCR).

Sanitary waste is proposed to be treated on site with a conventional Title 5 subsurface disposal system. According to the ENF, approximately 26,000 gpd of process water will "discharge . . . into the municipal system via new infrastructure to be constructed by the town." The location of the new infrastructure as well as the environmental impacts associated with the construction of same should be included in the EIR. All non-contact storm water is proposed to be treated and infiltrated on site.

Categorical Inclusion

The project is categorically included for the preparation of an Environmental Impact Report (EIR) pursuant to 301 CMR 11.25

(25) in that the new power plant will be capable of generating in excess of 100 MW of electricity.

Jurisdiction

The project will require numerous local, state and federal approvals. Federal approvals or notices will be required from the Federal Aviation Administration (FAA), Army Corps of Engineers (ACOE), the US Fish and Wildlife Service (USFWS), the US Environmental Protection Agency (EPA) and the Federal Energy Regulatory Commission (FERC) through the Energy Facilities Siting Board (EFSB). Massachusetts Department of Environmental Protection (DEP) approvals will be required for air emissions, industrial waste water, and 401 Water Quality Certification. The project must also comply with the Massachusetts Wetlands Protection Act and the conditions of the National Pollutant Discharge Elimination System (NPDES) General Permit for construction activities. A Department of Public Safety and State Fire Marshall approval is required for the proposed oil storage.

Since the EFSB has broad jurisdiction, including socioeconomic impact analysis and quality of life issues, I have included environmental impact issues in the Scope for which other specific state permits are not required (such as tree removal, noise and visual impacts). These issues will need to be addressed in the EFSB process and are pertinent to the MEPA analysis; therefore, they should be addressed in the DEIR.

SCOPE

General

The EIR should follow Section 11.07 of the MEPA regulations, as modified by this scope, for outline and content. The EIR should include a copy of the Certificate and copies of the

attached comments, which should be addressed as they relate to this Scope. I specifically refer the proponent to Section 11.07 (2)(c) of the MEPA regulations which requires that an EIR identify all federal and state permits and approvals sought for the project with their current status, and Section 11.07 (6) which requires the EIR to demonstrate how regulatory standards will be met.

Description of the Project

The EIR should present a site plan and an illustration of the project's overall appearance. The site plan should include proposed lighting, vegetative plantings and natural screening (the text should indicate if any additional physical buffer will be necessary to prevent inadvertent lighting and noise impacts on nearby residences) and all components of the proposed drainage system.

Needs and Alternatives Analysis

The EIR should briefly address the need for the proposed generating capacity and alternative ways to meet such need, consistent with current EFSB requirements. This is not to say that any formal determination will be made under MEPA regarding such need. To the extent this information must be developed anyway, however, it should be included in the context of describing the project's consistency with applicable state regulations, policies and plans.

The site selection review process referred to in the ENF should be summarized in the EIR. The purpose of the alternatives analysis is to consider what effects changing the parameters and siting of the project would have on the environment, keeping in mind that the objective of the MEPA review process is to assist permitting agencies in making decisions that will minimize damage to the environment to the greatest extent feasible.

Cumulative Impacts

I am aware of the legitimate concerns expressed by residents within the Towns of Blackstone, Bellingham and Mendon regarding the potential environmental impacts associated with the existing and proposed power plants in the area. Recently, the MEPA Unit has received three power plant proposals: ANP-Bellingham, ANP-Blackstone and IDC-Blackstone. These power plants, in addition to the existing plants in Milford, Bellingham and Burriville Rhode Island (as well as other large industrial emitters) should be analyzed for their cumulative environmental impacts.

The Department of Environmental Protection (DEP) will develop an interactive air quality modeling protocol that the project proponents will each be required to use as part of the air quality analysis, in addition to addressing the more specific air quality issues described below.

Similar issues are raised by the cumulative impacts of water consumption by these facilities (and the present serious water shortages faced by the host communities). The EIR should discuss this issue in detail. The proponent should consult with DEP's Water Management Act staff and DEP's Division of Water Supply to ensure compliance with all regulatory requirements of existing sources (i.e. aquifer protection districts, Zone II delineations, water conservation plans, Water Management permits, etc.). The Blackstone River Watershed Basin Team, which monitors all watershed activity, should be consulted to learn of those watershed locales that are experiencing stress specifically. The Town of Bellingham has indicated that sufficient existing water supplies exist to accommodate the project; however, this is not clear to the regulatory authorities. I expect that DEP, as part of the DEIR review process, will help the proponents to outline all unresolved regulatory and permitting requirements outstanding within the host communities. This too should be integrated into the discussion of water-related impacts described below.

Traffic

Although the facility is likely to generate minimal traffic once operational, the EIR should include a synopsis of the vehicle trips (including all truck traffic) that will be generated both during and after construction. The analysis should include an estimate of the traffic to be generated over time (i.e. intensity of traffic during various stages of construction). The analysis should include a truck routing plan and indicate what, if any, improvements will be necessary to Elm Street or any other town roadway.

Visual/Aesthetic Impact

The EIR should include a discussion of how the facility will fit into the visual context of its environmental setting and how aesthetic or viewshed impacts will be minimized.

Air Quality

An evaluation of ambient air quality (including noise), meteorology, plant emissions, dispersion, and mitigation measures should be provided. The scope of this effort should be reviewed by DEP to assure that the data required for its review are provided, if possible, in the EIR. I note that these analyses should consider the cumulative impacts of this facility combined with other generators within a predetermined radius. As indicated in its comment letter, DEP will be requiring interactive modeling for air quality impacts to assess the cumulative impacts of existing and proposed facilities with criteria emissions in excess of 100 tons per year within a 10-mile radius of the facility. After DEP has finalized the air quality modeling protocol for the power plant projects proposed for the Blackstone Valley, a copy of that protocol should be filed with the MEPA Unit for informational purposes only. In

addition, the proponent should include a copy of DEP's air quality modeling requirements in the EIR as well.

An electric and magnetic field (EMF) monitoring plan should be established in the Draft EIR, that, at a minimum, includes the following:

- * Baseline monitoring of magnetic field strengths should be conducted along the New England Power easement corridor within a half-mile radius of the project site. The monitoring program should comply with the Institute of Electrical and Electronics Engineers (IEEE) standards and specifications for magnetic field monitoring.

- * Results should be recorded on strip charts and be accompanied by field notes identifying locations, potential sources of anomalies, and conditions of use.

- * From the baseline data, the additional EMF expected to be produced by the addition of power to the existing overhead lines should be calculated. The analysis should address the specific concerns of the residents of Colonial Drive in Mendon.

- * The analysis should also include the reasoning and environmental impacts associated with the proposed underground electrical transmission line in Spruce Street.

Wetlands

Depending on the final layout and the route chosen for gas and electrical interconnects, the project could result in some amount of wetland resource alteration. Any wetland resource areas and associated buffer zones within 200 feet of any proposed development should be clearly identified on a plan at a scale of not greater than 1" = 100'. The wetlands that have been delineated in the field should be surveyed, mapped and shown on the plans indicating easily identifiable bench marks in the

field. Each wetland resource area should be characterized according to the Massachusetts Wetlands Protection Act, identified on the plan and described in the EIR text. The EIR should address the significance of the resource values of each wetland area including: riverfront areas, public and private water supplies, flood control, storm damage prevention, prevention of pollution and protection of fisheries and wildlife habitat. The text should explain whether the Blackstone Conservation Commission has accepted the boundaries and identify any disputed areas. Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, proposed crossing plans and direct or indirect drainage (i.e. overland flow) into wetland areas must be evaluated.

The Commonwealth has endorsed a policy that seeks avoidance of wetlands alteration to the maximum extent possible. Therefore, every effort should be made to find an alternative to the proposed access road location that avoids or reduces wetland impacts. Where wetland impacts are unavoidable, the EIR should propose mitigation measures to protect the resource areas and minimize short and long term impacts to the greatest extent possible.

Applicable federal permitting should be discussed as well as any local wetland by-laws and/or protection zones.

Wetlands Replication

A detailed wetlands replication and/or restoration plan should be included in the EIR for any required work. At a minimum the plans should include: replication location(s) delineated on plans at a scale no greater than 1"=100', elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, hydrology of areas to be altered and replicated; proposed wetland replication species, planned construction sequence; and a discussion of how compliance with

applicable performance standards will be achieved and monitored.

Drainage/Stormwater Runoff

The EIR should provide a complete drainage analysis to show the changes in runoff quality and quantity between pre- and post-development. The information in the report should include: a soils map of the site, existing and proposed watershed maps, and pre- and post-development runoff peaks for the appropriate storm events. Associated data and computation sheets should be available in a technical appendix. The report should also briefly explain the model(s) used in the calculations, provide the input parameters, RCN, Tc, and Tt values, and the computations for detention/retention basin sizing.

Characterization of the flows, based on nutrient, sediment, and contaminant loadings, should be predicted for stormwater discharges, overland runoff and any point source releases. The expected level of contaminant attenuation and the water quality of the discharge from the detention basins should be predicted.

The report should explain the objectives of the drainage system design and its consistency with DEP's Stormwater Management Policy. A schematic drainage design concept plan should be provided for the proposed drainage system and for the drainage system that will be used during construction to control erosion and sedimentation. These plans should, at a minimum, show the approximate locations of the project components, the proposed drainage design features, wetland resource areas and existing vegetation proposed to be removed. The EIR should demonstrate that the proposed drainage system meets best management practices for the discharge area, and in particular for on and off-site wetlands resource areas. Long-term impacts on wetland hydrology and vegetation should be avoided. The maintenance requirements to ensure efficiency of the drainage system should be explained and commitments should be made to ensure that the maintenance requirements will be adhered to in

the future. I note that for any construction project that will disturb in excess of five acres, the NPDES General Permit for Stormwater requires that a Notice of Intent to commence construction must be filed with the EPA at least one day prior to construction and that a Pollution Prevention Plan must be available on site at all times.

The "Stormwater Prevention Plan" and the "Spill Prevention Control and Containment Plan" (or "Emergency Response Plan") should be included in appendices to the report.

Water and Wastewater

The proponent should identify the quantity and sources of water to serve the project as well as its plans for wastewater disposal. Since the water and wastewater infrastructure will need to be upgraded, the associated environmental impacts of these new lines (and of the new gas pipeline connection and electrical distribution lines) should be identified. If on-site wells be proposed, a hydrogeological analysis that demonstrates sufficient supply without adverse impacts to other water resources should be included in the report.

The EIR should examine closely the impacts of water withdrawal on the municipal system as well as the larger impacts on the Blackstone River and the overall hydrology of the area. The analysis should consider the cumulative impacts of any new water withdrawals proposed. I note that the Town of Blackstone has indicated that sufficient water supply exists to serve the facility; however, the Town itself has a number of unresolved water supply and regulatory issues outstanding with DEP itself.

Although the power plant will utilize dry cooling technology to minimize water usage, the plant is still expected to have peak water demands of 250,000 gallons per day (gpd) and utilize (although the exact figure remains unclear from the ENF and public discussion) on average at least 100,000 gpd. Currently,

the primary source of water is proposed to be the Town's municipal system; however, there is a possibility that on site wells will be developed. Several commenters (including the Department of Environmental Protection) have noted the Town's current water supply and distribution problems (including seasonal water bans). Therefore, the EIR should examine closely the impacts of water withdrawal on the municipal system as well as the larger impacts on the Blackstone River basin and the overall hydrology of the area, including the maintenance of appropriate minimum streamflows. The proponent should work closely with the Town as it considers carefully its ability to provide the required water resources and the impact of such a substantial withdrawal on long-term growth issues.

The proponent is advised to work closely with DEP's Water Management Act office and the Blackstone River Watershed Basin Team contact person (Robert Kimball at DEP-Central) to make sure the EIR properly addresses these concerns.

Construction Impacts

The EIR should evaluate construction impacts, including erosion and sedimentation impacts, loss of vegetation and impacts on wildlife habitat. The objective of the analysis should be to identify construction scheduling and mitigation measures that can minimize adverse impacts and optimize site recovery.

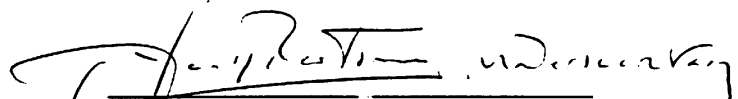
EIR Distribution

The proponent should distribute the EIR as required by the MEPA regulations at 301 CMR 11.24 and to all those listed below. In addition, two copies should be available at each of the

following locations in Blackstone and Mendon: Planning Department, Conservation Commission, Town Clerk, and the public libraries.

September 9, 1997

Date


for Trudy Cox, Secretary

TC/DEV/dv

Comments received :

Anthony DaSilva (8/8/97)
Steven A. and Kathy Miller (8/6/97)
James Cormier and Jill Kendrick (8/8/97)
Mr. & Mrs. Richard Levesque (7/30/97)
DEP-CERO; Attn Mary Richards (9/4/97)
Jeffrey M. Richard (7/30/97)
Patricia J. Graham (7/25/97)
Danial P. And Paula L. Gray (7/29/97)
Paul D'Orazio (7/17 & 9/2/97)
James P. And Donna M. Henderson (7/17/97)
Douglas J. and Kathleen M. Coffey-Daniels (7/16, 8/21 & 9/2/97)
Timothy and Kathleen Tardiff (7/15 & 9/2/97)
William J. And Elizabeth F. Hoermann (7/30/97)
Anita R. Burd (7/28/97)
Town of Mendon Board of Selectmen (7/28 & 8/21/97)
Massachusetts Audubon Society (7/28/97)
Dept. of Food and Agriculture (7/29/97)
DEP-WMA-Boston (7/28/97)
Robin L. Fletcher (9/2/97)
Anderson & Kreiger (9/2/97)
Phil Gidley (8/28/97)
Blackstone Valley Citizens for Environmental Preservation -
Petition (8/26/97)

Janice Zych (9/2/97)
Anita Byrd (9/2/97)
Douglas J. Daniels and James Henderson (8/28/97)
Robert G. Heumann (9/3/97)
Helen Dufresne (8/29/97)
Ed Rondeau (9/3/97)
Mark and Jaqueline Breton (9/3/97)

Report Requests:

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William J. Kearnan
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Marc and Betsy Beauchamp
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